

**Washington State Department of Ecology  
Biosolids Permit Review Checklist**

<p><b><u>A. Public Notice</u></b> (173-308-310(11))</p> <ol style="list-style-type: none"> <li>1. The notice must meet the requirements of notice in 173-308-310(11)(a) and (b). A copy of the published public notice statement and dates of publishing is to be sent to the Regional Ecology office and the Health District following 173-308-310(11)(a)(v). <u>Has notice been completed and received by Ecology and the Health District or attached to the permit application?</u></li>   <li>• SEPA Determination - <u>Does the application contain a copy of the SEPA Checklist and determination?</u> Public Notice under the 310(11) can be met for new or expanded land application under the requirements of the State Environmental Policy Act if the notice requirements of 310(11)(b) are met in the SEPA public notice process.</li>   <li>2. <u>Has proof of written approval of the landowner on whose land biosolids are applied for the first time, when the bulk biosolids do not meet the criteria to be classified as exceptional quality following 173-308-120 WAC been completed?</u></li> </ol> <p><b><u>B. Contents of a permit application</u></b> (173-308-310(5))</p> <p>All facilities must submit a complete and factually correct permit application in accordance with the schedule established in subsection (4) of section 173-308-310(4) WAC, on forms or in a format specified by the Department. <u>Does the application include a discussion of the following items 1. through 11. in enough detail to assess whether the application is complete?</u></p> <ol style="list-style-type: none"> <li>1. Activities conducted by the applicant which require it to obtain a permit, including a description of the facility and process in which the biosolids are generated or otherwise is designated a treatment works treating domestic sewage, with attached facility maps and drawings to support the facility description.</li> <li>2. Name, mailing address and location of the facility.</li> <li>3. Operator's name, address, telephone number, ownership status, and status as Federal, State, private, public, or other entity. (Add a contact name if different than the operator, including consultants who prepared documents pertaining to the permit application.)</li> <li>4. Whether or not the facility or any associated facilities or land application sites are located on Indian or federal lands.</li> <li>5. A listing of other relevant environmental permits, and all permits or construction approvals received or applied for under any of the following programs: <ul style="list-style-type: none"> <li>• Hazardous Waste Management program under the Resource Conservation and Recovery Act.</li> <li>• Underground Injection Control program under the Safe Drinking Water Act.</li> </ul> </li> </ol>	<p><b><u>SECTION A.</u></b></p> <input type="checkbox"/> Accept <input type="checkbox"/> Reject <input type="checkbox"/> See Comment A.1.  <input type="checkbox"/> Accept <input type="checkbox"/> Reject <input type="checkbox"/> See Comment A.1.  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Comment A.2.  <p><b><u>SECTION B.</u></b></p>   <input type="checkbox"/> Accept <input type="checkbox"/> Reject <input type="checkbox"/> See Comment B.1.  <input type="checkbox"/> Accept <input type="checkbox"/> Reject <input type="checkbox"/> See Comment B.2.  <input type="checkbox"/> Accept <input type="checkbox"/> Reject <input type="checkbox"/> See Comment B.3.  <input type="checkbox"/> Accept <input type="checkbox"/> Reject <input type="checkbox"/> See Comment B.4.  <input type="checkbox"/> Accept <input type="checkbox"/> Reject <input type="checkbox"/> See Comment B.5.
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<ul style="list-style-type: none"> <li>• NPDES program under the Clean Water Act.</li> <li>• Prevention of Significant Deterioration program under the Clean Air Act.</li> <li>• National Emission Standards for Hazardous Pollutants pre-construction approval under the Clean Air Act.</li> <li>• Ocean dumping permits under the Marine Protection, Research, and Sanctuaries Act.</li> <li>• Dredge or fill permits under Section 404 of the Clean Water Act.</li> <li>• Other relevant environmental permits, including State or local permits.</li> </ul> <p>6. A vicinity map extending one mile beyond the property boundaries of the facility, showing the location and means of access to the facility. There must be additional maps, if necessary, showing the same for any associated treatment or storage facilities not covered under a separate permit or specifically identified in a land application plan.</p> <p>7. Any biosolids monitoring data the applicant has for the last two years, including for land application sites any available soil or ground and surface water monitoring data, with a description of the sampling locations, and for wells the approximate depth to ground water.</p> <ul style="list-style-type: none"> <li>• <b>Pollutant concentrations</b> - for bulk biosolids applied to agricultural, forest, public contact sites, or reclamation lands (WAC 173-308-210 through 240) <u>does the application demonstrate that the concentration of a pollutants in bulk biosolids that are applied to these lands do not exceed the ceiling limit in Table 1 of WAC 173-308-160, and</u></li> </ul> <p><u>If the concentration of a pollutant in bulk biosolids that are applied to these lands exceeds the pollutant concentration limits in Table 3 of WAC 173-308-160, does the application demonstrate that the total cumulative loading rate for each pollutant does not exceed the limit in Table 2 of WAC 173-308-160?</u></p> <p><u>Are biosolids data included for: % total solids, % volatile solids, pH, (pollutant metals contents including As, Cd, Cu, Pb, Hg, Mo, Ni, Se, Zn) requirements in 173-308-160 WAC, and agronomic nutrient value (NH<sub>4</sub><sup>+</sup>, NO<sub>3</sub><sup>-</sup>, TKN) of the biosolids to meet requirements of 173-308-190 WAC?</u></p> <ul style="list-style-type: none"> <li>• <b>Pathogens</b> - for bulk biosolids applied to agricultural, forest, public contact sites, or reclamation lands, (WAC 173-308-210 through 240) <u>does the application describe how the bulk biosolids that are applied to land meet Class A requirements for pathogens, or if not</u></li> </ul> <p><u>does the application describe how the site management and access restrictions in the attached work sheet (from subsections (4)(a)(i) through (x) and (b)(i) through (iii) of sections 173-308-210, 220, 230 or 240 WAC) for bulk biosolids that are Class B for pathogens, are met?</u></p>	<div> <input type="checkbox"/> Accept  <input type="checkbox"/> Reject  <input type="checkbox"/> See Comment B.6. </div> <div> <input type="checkbox"/> Accept  <input type="checkbox"/> Reject  <input type="checkbox"/> See Comment B.7. </div> <div> <input type="checkbox"/> Accept  <input type="checkbox"/> Reject  <input type="checkbox"/> See Comment B.7.  Pollutants. </div> <div> <input type="checkbox"/> Accept  <input type="checkbox"/> Reject  <input type="checkbox"/> See Comment B.7.  Biosolids data. </div> <div> <input type="checkbox"/> Accept  <input type="checkbox"/> Reject  <input type="checkbox"/> See Comment B.7.  Pathogens. </div>
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<p>Pathogen data should include a description of the treatment methods and processes and testing results demonstrating Pathogen Reduction requirements of 173-308-170 WAC. Data and analysis, and if needed, the geometric mean or the density of the fecal coliform, Salmonella, and if applicable, helminth ova and viruses testing results for determination of the Class (A, B or Exceptional Quality) of the biosolids.</p>	<input type="checkbox"/> Accept <input type="checkbox"/> Reject <input type="checkbox"/> See Comment B.7. Pathogen data.
<ul style="list-style-type: none"> <li>• <b>Vector attraction reduction</b> - for bulk biosolids applied to agricultural, forest, public contact sites, or reclamation lands (WAC 173-308-210 through 240) does the application describe the treatment methods and processes and testing results demonstrating the Vector Attraction Reduction (VAR) requirements of 173-308-180 (2) through (7) WAC including the determination of when the VAR is achieved for Class A or Exceptional Quality biosolids with regard to the treatment process achieving pathogen reduction, or</li> </ul>	<input type="checkbox"/> Accept <input type="checkbox"/> Reject <input type="checkbox"/> See Comment B.7. Vectors.
<p>Does the application describe the process in which the biosolids are injected or incorporated into the ground to meet the following requirements:</p>	
<ul style="list-style-type: none"> <li>• The biosolids must be injected below the surface of the land; and no significant amount of the biosolids may be present on the land surface within one hour after the biosolids are injected, or</li> </ul>	<input type="checkbox"/> Accept <input type="checkbox"/> Reject <input type="checkbox"/> See Comment B.7.
<ul style="list-style-type: none"> <li>• Describe the process in which biosolids are incorporated into the soil within six hours after application to the land, and</li> </ul>	<input type="checkbox"/> Accept <input type="checkbox"/> Reject <input type="checkbox"/> See Comment B.7. Soil incorporation.
<ul style="list-style-type: none"> <li>• When the biosolids are Class A for pathogens, describe how the biosolids are injected below the land surface within eight hours after being discharged from the pathogen treatment process.</li> </ul>	
<p>8. A description of the applicant's biosolids use and disposal practices including, where applicable, the location of any sites where the applicant transfers biosolids for treatment or disposal, as well as the name of the applicator or other contractor who applies the biosolids to land if different from the applicant.</p>	<input type="checkbox"/> Accept <input type="checkbox"/> Reject <input type="checkbox"/> See Comment B.8.
<p>9. Land application plans, as required under subsection 173-308-310(6). The contents of the land application plans are listed sections of the checklist below.</p>	See Checklist Section D for these items.
<p>10. The amount of biosolids produced and the amount of biosolids applied to the land during the previous year, and estimated to be produced or applied to the land on an annual basis during the life of the permit, including the following:</p>	<input type="checkbox"/> Accept <input type="checkbox"/> Reject <input type="checkbox"/> See Comment B.10.
<ul style="list-style-type: none"> <li>• The annual production of biosolids (based on a five year average),</li> <li>• The amount of biosolids applied to the land during the previous year,</li> <li>• The estimated amount of biosolids remaining in storage, if any.</li> </ul>	
<p>11. Any other information required to determine the appropriate standards for biosolids permitting, and any other information the department may request and reasonably require to assess biosolids use and disposal practices, to determine whether or not to issue a permit, or to ascertain appropriate permit requirements under this chapter.</p>	<input type="checkbox"/> Accept <input type="checkbox"/> Reject <input type="checkbox"/> See Comment B.11.

<p><b><u>C. Land Application Plans required</u></b> 173-308-310(6) WAC</p> <p>1. <u>EQ biosolids - does the application contain or describe assurances through record keeping and other means that demonstrate that all requirements of the Biosolids Management rule are met when bulk biosolids are applied to the land following 173-308-310(6)(a)(i) WAC?</u></p> <ul style="list-style-type: none"> <li>Additional information may be required if a person fails to provide adequate assurances that the requirements are met, or if the Department finds a strong benefit to the public. This can include general and site specific land application plans, and public notice following 173-308-310(6)(a)(ii) and/or (iii) WAC.</li> </ul> <p>2. <u>Bulk Biosolids - A Land Application plan is required for biosolids that are not EQ biosolids following 173-308-310(6)(b) WAC. Except when biosolids are delivered to a beneficial use facility that is classified as a treatment works treating domestic sewage (see 173-308-310(6)(g), for facilities that propose to apply biosolids to the land that do not meet criteria to be classified as exceptional has the applicant either:</u></p> <ul style="list-style-type: none"> <li>Submitted with their permit application a <b><u>site specific land application plan</u></b> for each site where biosolids will be applied during the life of the permit; or</li> <li>Submitted with their permit application a <b><u>general land application plan</u></b>, and at a later date prior to applying biosolids to a site, submit a site specific land application plan for each site where biosolids will be applied to the land.</li> <li>facilities that submit a general land application plan may also submit at the same time any available site specific land application plans for approval.</li> <li>site specific land application plans must be consistent with a facility's general land application plan, if a general land application plan has been submitted or required.</li> </ul> <p><u>Note:</u> Facilities with lagoons or other treatment works that have infrequent production of biosolids from the system, must submit a general land application plan even though they may have a limited ability to predict biosolids management during the life of this general permit. These facilities may need to modify their coverage at a later date when more information is known about biosolids removal from the facility.</p>	<p><b><u>SECTION C.</u></b></p> <p><input type="checkbox"/> Accept  <input type="checkbox"/> Reject  <input type="checkbox"/> See Comment C.1.</p> <p><u>Site Specific Plan</u>  <input type="checkbox"/> submitted  <input type="checkbox"/> not submitted  <input type="checkbox"/> See Comment C.2.</p> <p><u>General Plan</u>  <input type="checkbox"/> submitted  <input type="checkbox"/> not submitted  <input type="checkbox"/> See Comment C.2.</p> <p><u>Beneficial Use Facility Plans Submitted</u>  <input type="checkbox"/> General Plan  <input type="checkbox"/> Site Specific Plan  <input type="checkbox"/> See Comment C.2.</p>
<p><b><u>D. Contents of Site Specific Land Application Plans</u></b> 173-308-310(6)(d) WAC</p> <p><u>For each of the following items 1 through 9, does the site specific land application plan provide information necessary to determine if the site is appropriate for land application of biosolids, and a description of how the site will be managed?</u></p> <p>1. Whether or not it is known or can be determined that biosolids containing pollutants in excess of the values established in Table 3 of 173-308-160 (2)(b) WAC, have ever been applied to the site, and if so:</p> <ul style="list-style-type: none"> <li>The date(s) when the biosolids were applied (if known).</li> <li>The amount of biosolids applied (if known).</li> <li>The concentration of pollutants in the biosolids (if known).</li> </ul>	<p><b><u>SECTION D.</u></b></p> <p><input type="checkbox"/> Accept  <input type="checkbox"/> Reject  <input type="checkbox"/> See Comment D.1.</p> <p>Note: Review also Attachment 1, Site Management and Access Restrictions Worksheet. Include comments if needed.</p>

<ul style="list-style-type: none"> <li>• The area(s) of the site to which biosolids were applied (if known).</li> </ul> <p>2. A discussion of the types of crops grown or expected to be grown, their intended end use(e.g. pasture grass for a feed crop, corn as a food crop), and the current distribution of crops on the site that meet the site management and access restrictions in <u>Attachment 1, Biosolids Permit Review Checklist Site Management and Access Restrictions Worksheet</u> and a discussion of how the other site management and access and posting restriction in Attachment 1 will be met.</p> <p>3. An explanation of how agronomic rates will be determined during the life of the site along with any currently available calculations. Whenever agronomic rates are determined or conditions change (i.e. a change in crops or agronomic rates) an update of the agronomic rate calculations must be filed with the Department.</p> <p>4. Method(s) machinery used, and timing of application of the biosolids, and in incorporation of the biosolids into the soil to meet VAR, if required.</p> <p>5. Seasonal and daily timing of biosolids applications, and soil incorporation.</p> <p>6. Any available data from soils, surface water, or ground water monitoring collected from the site within the last two years, and any proposed new monitoring or continuation of existing monitoring programs.</p> <p>7. The name of the county and water resource inventory area where biosolids will be applied.</p> <p>8. A description of how biosolids will be stored at the site and also addressing related off-site storage.</p> <p>9. Site map(s) showing:</p> <ul style="list-style-type: none"> <li>• The means of access to the facility and location by street address if applicable. a copy of the assessor's plat map(s) with the application area(s) clearly shown or the latitude and longitude of the approximate center of each land application site, and other means of identifying the location as appropriate and available.</li> <li>• The number of acres in the site.</li> <li>• Location and extent of any wetlands on the site.</li> <li>• Topographic relief of the application site and surrounding area.</li> <li>• Adjacent properties and uses and their zoning classification.</li> <li>• Any seasonal surface water bodies located on the site or perennial surface water bodies within 1/4 mile of the site.</li> <li>• The location of any wells within 1/4 mile of the site that are listed in public records or otherwise known to you, whether for domestic, irrigation, or other purposes.</li> <li>• The width of buffer zones to surface waters, property boundaries and other features requiring buffers.</li> <li>• The presence and extent of any threatened or endangered species or related critical</li> </ul>	<div> <input type="checkbox"/> Accept  <input type="checkbox"/> Reject  <input type="checkbox"/> See Comment D.2.         </div> <div> <input type="checkbox"/> Accept  <input type="checkbox"/> Reject  <input type="checkbox"/> See Comment D.3.         </div> <div> <input type="checkbox"/> Accept  <input type="checkbox"/> Reject  <input type="checkbox"/> See Comment D.4.         </div> <div> <input type="checkbox"/> Accept  <input type="checkbox"/> Reject  <input type="checkbox"/> See Comment D.5.         </div> <div> <input type="checkbox"/> Accept  <input type="checkbox"/> Reject  <input type="checkbox"/> See Comment D.6.         </div> <div> <input type="checkbox"/> Accept  <input type="checkbox"/> Reject  <input type="checkbox"/> See Comment D.7.         </div> <div> <input type="checkbox"/> Accept  <input type="checkbox"/> Reject  <input type="checkbox"/> See Comment D.8.         </div> <div> <input type="checkbox"/> Accept  <input type="checkbox"/> Reject  <input type="checkbox"/> See Comment D.9.         </div>
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habitat.

- The location of any critical areas on site, as required to be identified under Chapter 36.70A RCW in the county's growth management plan.
- The location and size of any areas which will be used to store biosolids.

**E. General Land Application Plans** 173-308-310(6)(e) WAC

For proposed beneficial use facilities that intend to apply bulk biosolids (not meeting exceptional quality criteria) to the land, or when a site specific land application plan (for biosolids not meeting exceptional quality criteria) is not submitted as a part of the permit application, a general land application plan must be submit for approval as a part of their permit application. Does the general land application plan address or contain the following items 1 through 5?

1. Describe the geographical area covered by the plan, including the names of all counties and water resource inventory areas where biosolids will be applied.
2. Identify site selection criteria.
3. Describe how sites will be managed.
4. Provide for advance notice to the department or local health department of new or expanded land application sites. The advance notice must be at least 30 days, to allow time for the department (or health department) to object prior to the biosolids applications.
5. Provide for advance public notice as specified in WAC 173-308-310(11).

**F. Recordkeeping and Certification Statement**

Does the application contain a description of records to be kept following Attachment 2, Recordkeeping and Certification Statement for the following persons?

1. The person who prepares biosolids for application to land must keep the records required in WAC 173-308-290 (2) and (3), or
2. The person who applies biosolids that do not meet criteria to be classified as exceptional quality to agricultural land must keep the records required in WAC 173-308-290(4)?
3. Records must also be kept on the amount and type biosolids applied to the land under different management scenarios or that are disposed of in a municipal solid waste landfill.
4. Does the application contain a copy of the Certification Statement to be signed by a responsible official as described in WAC 173-308-310(8) and submitted with the annual report?

**SECTION E.**

- ☐ Accept  
☐ Reject  
☐ See Comment E.1.

- ☐ Accept  
☐ Reject  
☐ See Comment E.2.

- ☐ Accept  
☐ Reject  
☐ See Comment E.3.

- ☐ Accept  
☐ Reject  
☐ See Comment E.4.

- ☐ Accept  
☐ Reject  
☐ See Comment E.5.

**SECTION F.**

- ☐ Accept  
☐ Reject  
☐ See Comment F.1.

- ☐ Accept  
☐ Reject  
☐ See Comment F.2.

- ☐ Accept  
☐ Reject  
☐ See Comment F.3.

- ☐ Accept  
☐ Reject  
☐ See Comment F.4.

**G. Annual Reporting** WAC 173-308-295

The person who prepares biosolids for application to land must submit an annual report in accordance with the requirements of WAC 173-308-295.

1. Class I biosolids management facilities, treatment works treating domestic sewage with a design flow rate equal to or greater than one million gallons per day, and those that serve 10,000 people or more, must submit to the department by March 1 of each year, the following information for the preceding calendar year:
  - All applicable information required in record keeping in WAC 173- 308-290 (2), (3) and (5);
  - The information in WAC 173-308-290 (4)(c)(i) through (v) and WAC 173-308-290 (4)(d) and (d)(i) and (ii) when ninety percent or more of any of the cumulative pollutant loading rates in Table 2 of WAC 173-308-160 have been reached.
2. Other facilities and treatment works treating domestic sewage that are not required to submit an annual report under WAC 173-308-295(1) must submit part or all of any applicable information in WAC 173-308-290 (1)(a) and (b) as required by the Department on the written request of the Department, or in accordance with the requirements of an applicable permit issued by the Department.

**H. Other Information**

1. Agronomic rate calculations including spreadsheets or calculation worksheets meeting the requirements of 173-308-190 WAC.
2. Identification of any portion of the site that falls within a wellhead protection area.
3. Identification of any portion of the site that falls within an area included under a local Shoreline Master Program.
4. Comments from local health departments (recommendations from delegated authorities)
5. Local health department solid waste permit / operations plan as required in 173-308-310(17)(c) WAC.

**I. Application Signature** Is the application signed by the appropriate responsible official following 173-308-310(8)?

**SECTION G.**

Annual Report:

- ☐ discussed  
☐ not discussed  
☐ See Comment G.1.

**SECTION H.**

Other Information:

- ☐ needed  
☐ not needed  
☐ See Comment H.1.

**SECTION I.**

Responsible person

- ☐ signed  
☐ not signed  
☐ See Comment I.1.